Bridge Preservation Program -- No. 500313

Category Transportation Date Last Modified January 5, 2002
Agency Public Works & Transportation Previous PDF Page Number NONE
Planning Area Countywide Required Adequate Public Facility NO
Relocation Impact None.

EXPE	NDITUI	RE SCHI	EDULE	(\$000)

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Cost Element	Total	Thru FY01	Estimate FY02	Total 6 Years	FY03	FY04	FY05	FY06	FY07	FY08	Beyond 6 Years
Planning, Design			_								
and Supervision	1,394	0	0	1,394	244	350	200	200	200	200	0
Land											
Site Improvements and Utilities											
Construction	3,573	0	0	3,573	524	1,049	500	500	500	500	0
Other											
Total	4,967	0	0	4,967	768	1,399	700	700	700	700	*
				FUNDING	G SCHEDU	JLE (\$000)					
G.O. Bonds	3,848	0	0	3,848	600	1,232	504	504	504	504	0
Federal Aid	1,119	0	0	1,119	168	167	196	196	196	196	0

ANNUAL OPERATING BUDGET IMPACT (\$000)

DESCRIPTION

This project provides funding to remove corrosion and to install protective coatings on existing County steel bridges that have been identified as needing surface recoating through the Biennial Bridge Inspection program. Bridge preservation field operations include the removal of the existing coating system which may contain hazardous materials; containment of blast cleaning and waste paint particles; disposal of the hazardous materials at a pre-approved disposal site, as required by Maryland and Federal environmental regulations; installation of protective coating systems; and inspection to ensure compliance with environmental and contract requirements.

Service Area

Countywide

JUSTIFICATION

A specialized study in paint surface preparation techniques, hazardous waste containment and disposal, paint products and application procedures, inspection and training criteria, and cost assessment has been conducted through the Facility Planning: Bridges Project to begin evaluation and testing of existing County bridges for inclusion in the Bridge Preservation Program. The study includes condition evaluation of existing bridges, need assessment, prioritization, cost estimates, and contract specification preparations. The benefits of this program will include extending the useful service life of existing steel bridges, prevention of long-term structural deficiencies, decreases in vehicle load restrictions, reduced potential road closures, and public inconvenience. The long-term goal of this program will be to protect existing bridges and keep them in good condition to reduce bridge renovation/replacement costs. In the first two years, this project will address 36 of the County's steel bridges. Of these 36 bridges, 10 are currently eligible for up to 80 percent Federal aid. The remaining bridges are currently under review for eligibility under Federal aid.

Specific Data

The County currently has 118 steel girder and beam structures in its inventory of long-span and short-span bridges. The degree of specialized work required to restore the protective coatings to in-service bridges is beyond the scope of routine operations. Proper protective coating systems are an essential component of bridge maintenance to prevent long-term structural steel deterioration. At this time, only renovation needs are addressed by the Bridge Renovation Program which is mainly used to perform structural improvements to bridges. Many defects identified through the Biennial Bridge Inspection Program are the direct result of bridges not being properly protected to withstand chemical and environmental elements. These defects include frozen and deteriorated steel bearings, corroded structural steel, and steel beam section loss. The result of failing to protect these components is reduced load carrying capacity and earlier bridge replacement.

OTHER

The scope and schedule are new for FY03. There is a current backlog of approximately 60 bridges in need of painting with an additional 58 bridges to require future painting. The expected life cycle of a coating system is 15 years. *Expenditures will continue indefinitely.

APPROPRIATION AN	D	
EXPENDITURE DATA	1	
Date First Appropriation	FY03	(\$000)
Initial Cost Estimate		4,967
First Cost Estimate		
Current Scope	FY03	4,967
Last FY's Cost Estimate		0
Present Cost Estimate		4,967
Appropriation Request	FY03	768
Appropriation Request Est.	FY04	1,399
Supplemental		
Appropriation Request	FY02	0
Transfer		0
Cumulative Appropriation		0
Expenditures/		_
Encumbrances		0
Unencumbered Balance		0
Partial Closeout Thru	FY00	0
New Partial Closeout	FY01	0
Total Partial Closeout		0

COORDINATION

MD-Department of Natural Resources Department of Permitting Services M-NCPPC WSSC PEPCO

Washington Gas
Bell Atlantic Company
Manuard State Higher

Maryland State Highway Administration OSHA

